

ABSTRACT OF THE DISCLOSURE

In a refrigerator having a coolant cooling means for cooling a coolant at the entrance of a flow control valve therein, when the cooling amount in the coolant cooling means is deficient as well as excessive, the COP has decreased. The refrigerator includes a compressor (2) for compressing the coolant, a radiator (3) for radiating heat from the coolant, a coolant cooling means (15) for cooling the coolant, a flow control valve (4) for regulating the flow volume of the coolant, evaporator (5) for evaporating the coolant, and a heat-exchange-amount control means (16) for controlling the amount of heat exchanged in the coolant cooling means (15), wherein the coolant is circulated through the compressor (2), the radiator (3), the coolant cooling means (15), the flow control valve (4), and the evaporator (5), in that sequence.